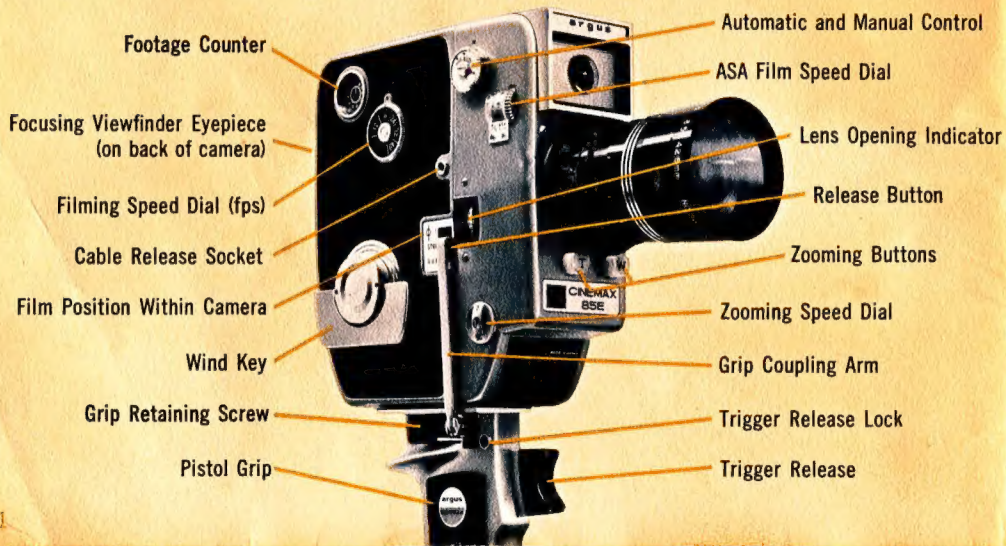


**argus**  
**CINEMAX** 85E  
8mm movie camera

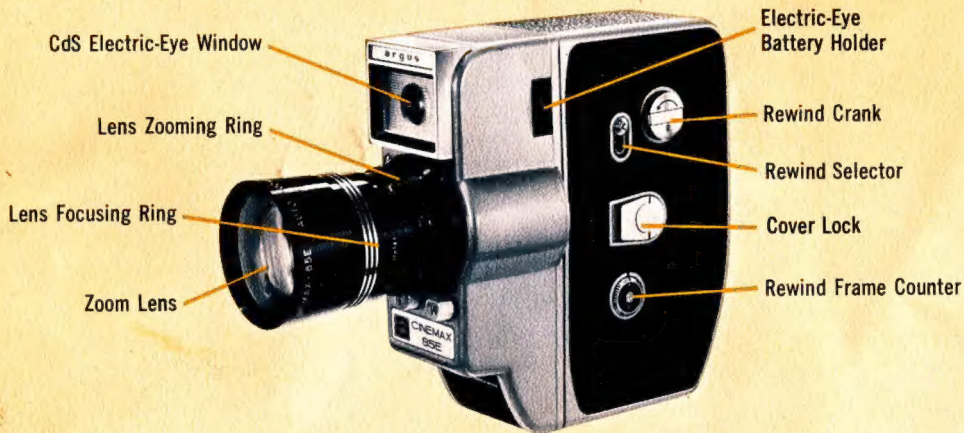


AUTOMATIC POWER-ZOOM REFLEX

*Here are the important functional parts of your camera. Familiarize*



*yourself with them, as they are referred to throughout this book.*



To remove Pistol Grip, just turn Grip Retaining Screw counterclockwise.

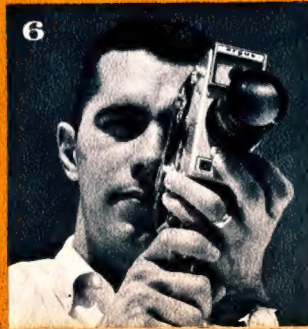
*Minor changes in the appearance of this camera may not be included in these illustrations.*

## To Operate Your Camera, Here's All You Do . . .

- 1 Load the camera.** Open the cover and thread the film as shown by the diagram inside camera. Complete directions on pages 9 - 10. Hold pressure plate closed and run camera briefly to check film movement, then lock cover.
- 2 Wind the camera fully.** Watch the footage counter (the outside figures are feet) and run the camera until the counter indicates 0. The counter tells how much film has been exposed.
- 3 Set the filming speed (frames per second).** Set the dial to 16 for normal movies (see page 6).
- 4 Set the ASA film speed.** Set the filming speed you have selected opposite the film speed (exposure index) of your film (see page 7).
- 5 Set the automatic control.** Turn the Automatic and Manual Control Dial to Auto for automatic exposures. (Be sure meter battery is installed.)
- 6 Take the picture.** Set the focus on the lens, frame the subject, check the safety signal, and press the Trigger Release.

See pages 11 and 12 for information on zooming. Instructions on using the second half of the film and unloading are on pages 16 and 18.





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## REPLACEMENT BATTERIES

- **Mallory RM-625R**
- **Eveready E-625**
- **Burgess Hg-625R**

or equivalent 1.35-volt mercury battery of the same type and size.

## Battery Installation

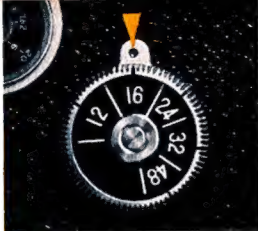
The sensitive cadmium sulfide (CdS) electric-eye exposure system in your camera is powered by a reliable 1.35-volt mercury battery.

To install the battery, place it in the plastic holder so the smallest diameter (+) side is down. When you install the plastic holder in the camera, the + side should face toward the front.

Although this battery has a very long life, you should check its condition periodically. To do this, set the Automatic and Manual Control to "C." If the Lens Opening Indicator needle is anywhere in the red area at the top of the scale, the battery is in good condition. If the needle does not reach this area, a new battery should be installed. Taking movies with a weak battery can result in over-exposed (too light) pictures. Your photographic or electronic supply dealer will have the correct replacement battery in stock or will be able to order one for you. See the chart at the left for some of the different batteries available.

**Important:** Always turn the Automatic and Manual Control to "Off" to conserve the battery when you are not using the camera.

## Filming Speeds



**16 fps** — This is the standard frames per second speed for regular movies. Non-adjustable projectors operate at this speed.

**12 fps** — This slower-than-normal filming speed will give you faster-than-normal action when the film is projected at 16 fps. Use this speed for “fast-motion” effects.

**24, 32, and 48 fps** — Movies filmed at these speeds will give “slow-motion” effects when they are projected at 16 fps. These settings are useful when action must be slowed down, such as during sporting events.

## Choosing Your Film

Your Argus Cinemax 85E Movie Camera uses standard double 8mm roll film which is available from your photo dealer. The chart below shows some of the color films that are available. Daylight-type films are for outdoors only. Type-A films are basically for use indoors when using artificial lighting such as movie lights.

FILMS ➡ ASA FILM SPEEDS ➡	Daylight	Tungsten
ASA 10 Daylight Films	10	—
ASA 16 Type A Films	10*	16
Kodachrome II Daylight	25	—
Kodachrome II Type A	25*	40
Anso Moviechrome 8 Daylight	20	—
Anso Moviechrome 8 Type A	10*	16

\* You must use Type-A filter with these films outdoors. See dealer. Set tungsten film speed when using movie lights or photofloods.



## Setting the ASA Film Speed

Turn the Film Speed Dial to set the filming speed (frames per second) you are using on your camera opposite the ASA or DIN rating of your film. See page 6 for filming speed information. The ASA film speeds are in black. If your film has a DIN rating, use the red numbers on the dial.

Be sure to change this setting whenever you change types of film, use a filter, or use a different frames-per-second setting. The example at the left shows a filming speed of 16 fps set opposite a film speed of ASA25 (or DIN 15).

Note that the film speed scale on the camera consists of ASA and DIN film speeds numbers (exposure indexes) and dots between the numbers. The dots also represent film speeds. See the chart at the left for the actual ratings. For example, the first dot above ASA20 represents ASA25, the rating of Kodachrome II Daylight movie film.

### ASA FILM SPEEDS

400	• (50)
250	40
• (200)	• (32)
160	• (25)
• (125)	20
• (100)	• (16)
80	• (12)
• (60)	10



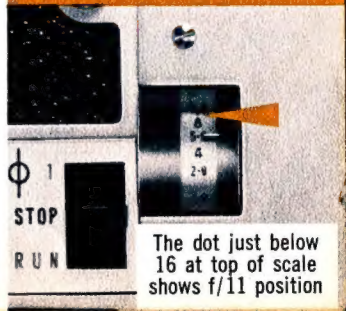
## Automatic Exposures

For electric-eye exposures, just turn the Automatic and Manual Control to "Auto." Be sure the ASA Film Speed Dial is adjusted for the film in the camera and the filming speed used (see page 7). With the camera aimed at the subject, the Lens Opening Indicator will show the opening being set.

When the control is moved from Auto to any other position on the dial, the electric-eye mechanism is disconnected.

To conserve the power of the mercury battery that powers the CdS cell electric-eye system, always turn the Automatic and Manual Control to OFF when not actually taking movies. Battery power is being used in all the dial positions except Off. See page 5 for information on battery replacement.

**Note:** The Safety Signal in the viewfinder will show red if the control is in Off instead of on Auto or Manual.



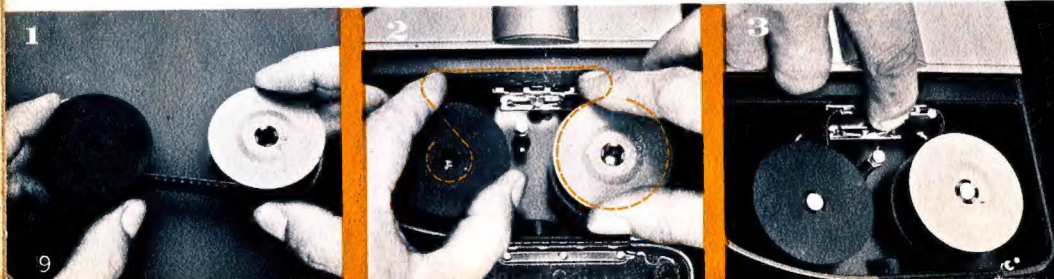
The dot just below 16 at top of scale shows f/11 position

## Loading Your Camera

*Your camera should be loaded in subdued light—never in direct, bright sunlight.*

**1** Wind the camera fully with the wind key. Unlock and open the back cover by lifting up on the lock tab and turning it counterclockwise. Take the empty take-up spool out of the camera. Remove the new film from the box and can and remove the paper band (or tape) from the film.

**2** Pull out several inches of film leader. Be careful not to let the film unwind from the full spool while loading. Hold the full spool (four-notch hole upward) in your right hand and the take-up spool (three-notch hole upward) in your left. Thread the film into the take-up spool slot and turn



the spool clockwise about two turns to be sure the film is secure (Illus. 1).

**3** Holding the spools and film as shown in Illus. 2, carefully slip the film in front of the pressure plate and the spools down over the spindles. You may have to rotate the spools to get them to seat. Be sure to push the film **all the way** down in front of the pressure plate so it will seat properly when the pressure plate is closed.

**4** With the camera cover open, hold the pressure plate against the film track with your finger and press the release button or trigger release (Illus. 3). Run a few inches of film through to be sure it is moving properly through the mechanism. Close and lock the camera cover.

**5** The footage counter automatically sets itself when the camera back is opened. **Before you take movies**, run the camera until the counter indicates 0. This runs off the leader. The counter will indicate the number of feet taken on that side of the film. The footage counter reads in both feet (outer figures) and meters (inner figures). Continue taking pictures until the counter shows 25 feet. You have then completely exposed that side of the film. **Before you open the camera**, run the film (without taking movies) until the counter index points to the orange triangle.

When you have run the film through the camera once, only one-half of it is exposed. Turn the spool over and reload once again as shown here (see pages 16 and 18)



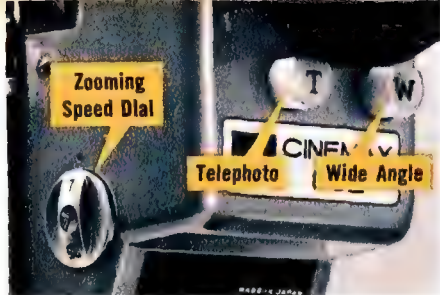
## Viewing and Zooming

Your camera's Cinemax Zoom lens is a single lens which does the work of several. You can take movies from wide-angle to telephoto without taking a single step.

To preview the scene before you take movies, turn the lens zooming ring until you see the desired effect in the viewfinder. The illustrations show the approximate coverage at different lens positions. The focal lengths of the zoom positions are on the zooming ring.

To power zoom the lens from one setting to another, start taking movies and push either the T or W zooming button. Pushing the T button will zoom the lens to the telephoto position. The W button will zoom the lens to wide-angle. **Power zooming can be done only when either the trigger release or release button is depressed and the camera is running.**





Turn the **zooming speed dial** to adjust the zooming time. The settings of 3.5 and 7 indicate the time in seconds from full telephoto to full wide angle or the reverse when the camera is running at 16 fps. At higher or lower filming speeds, the zooming times will change proportionately.

If the Zooming Speed Dial does not turn easily from one setting to another, push the release button up (to move the film a single frame) and then make the change.



## Focusing the Lens

To focus easily through the viewfinder, first turn the zooming ring to telephoto. Then turn the focus ring until the image in the **center** of the finder is sharp. The subject distance can also be estimated.

**Adjust the focusing viewfinder eyepiece** for your eyesight by first focusing the camera lens, then turning the eyepiece until the image is as sharp as possible.



## Taking the Picture

Sight through the viewfinder and frame your picture. Preselect your view by rotating the lens zooming ring. Hold the camera steady with the pistol grip, leaving the left hand free to focus and operate the zooming buttons. Start taking pictures by pressing the trigger release on the pistol grip with the index finger (be sure the trigger release lock is off—the green button is pushed in). If you wish to change the scenes to wide-angle or telephoto, push either of the zooming buttons for the effect wanted.

You can also push the release button on the camera **all the way down** to lock it in place for continuous running. With your camera on a tripod, this allows you to get into your own movies. To unlock the release, just push it up.

The footage counter will click every time .6 of a foot of film has gone through. This is very useful as a timer for the length of your scenes (see page 16).

The Safety Signal appears as a rectangle just above the viewfinder frame as you look through the viewfinder. If the light level is too low for good exposures (as on a very dark day) the rectangle will show red. Take movies on the Automatic setting only when this rectangle shows clear, for if movies are taken when it shows red, they will be under exposed (too dark).

The release on the pistol grip is used for regular movies only. It cannot be used for continuous run or for single-frame.

By pressing upward on the release button on the camera, you can expose just a single frame at a time. By operating the camera in this manner, you can take special effects such as animations, titles, and time-lapse movies. Have the camera on a tripod when doing single-frame photography. See your photo dealer for additional information on this type of movie-making.

The cable release socket will accept any standard threaded-tip cable release which will operate the camera for regular movies only.





## Tips for Better Movies

Always hold the camera as steady as possible when taking movies. Any slight wavering of the camera will be very obvious in your movies when projected on the screen. Use a tripod whenever possible. Tripod sockets are built into both the camera base and pistol grip.

Take pictures with the sun behind you whenever possible. The electric eye can "read" the scene and set the lens more accurately if this rule is followed.

"Panning" is the term used when the camera is moved horizontally or vertically when making movies. This should be done slowly and carefully to avoid unwanted effects as jerking movements and blurring of the projected picture.



Time your scenes so that they are at least five or six seconds in length. It is better to shoot longer scenes as they can always be cut when editing. The scene timer (click in the footage counter) will click about every 3 seconds (.6 foot of film) when the camera is running.

Plan your movies in advance to add a feeling of continuity to them. Try filming your movies in a story sequence instead of a series of unrelated scenes.

When taking movies indoors with a movie light, light bar, or photoflood lamps, be sure you have indoor Type-A film in the camera and the film speed is set correctly. The electric eye will set the exposure for you automatically. Keep your subject closer to the background than to the camera to assure even lighting.

## Using Second Half of Film



When the Footage Counter points to "25", you have completely exposed that side of the film. **Do not take any more movies.** However, you must run the camera until the counter index points to the orange triangle before you open the cover. In subdued light, carefully remove both spools. Turn over the spool containing the film and reload the camera as before (see page 9). When the entire film is exposed, unload the camera as described on page 18.

## Using Manual Lens Opening

When your subject is against an extremely light or dark background, better movies can be obtained by setting the lens openings manually as follows:

**1** With the Automatic and Manual Control on "Auto," step up close to the subject, within several feet if possible, and hold the camera so the lens is aimed at the subject.

While holding the camera in this position, note the lens opening on the Lens Opening Indicator.

**2** Step back to the original position and turn the Manual and Automatic Control to Manual and adjust it to the number that was noted in Step 1. This will set the lens to correct lens opening for the subject only.

There may be other times where you wish to use manual lens openings instead of the electric eye. This chart gives the lens openings to use for average subjects under different lighting conditions.

Film ▼	bright sun	hazy sun	cloudy bright	cloudy dull
ASA 10 Color Films	f/8	f/5.6	f/4	f/2.8
Kodachrome II Daylight	f/11	f/8	f/5.6	f/4
Ansco Moviechrome 8	f/11	f/8	f/5.6	f/4
ASA 40 Films	f/16	f/11	f/8	f/5.6

## Movies Up Close

Your camera's lens will focus as close as 5 feet. When using the telephoto lens position at this distance, you can take excellent close-ups of flowers, small animals, etc.

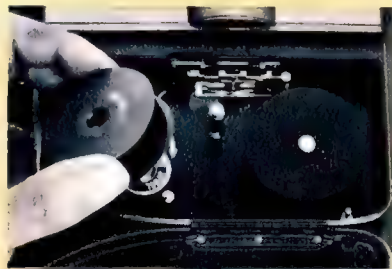
To get even closer for a larger image of small subjects, you can use a close-up lens in front of the camera lens. Close-up lenses are made in different strengths and are available from your photo dealer. He can also supply you with a screw-in adapter ring necessary to hold the close-up lens in place.

Because you will be taking movies very close to the subject, it is very advisable that you use a tripod to prevent blurry pictures caused by unintentional camera movement.

Be sure to focus on the subject carefully, using the center area of the viewfinder.

## Unloading

After the second half of the film has been exposed and the counter index is at the orange triangle, open the cover in subdued light and carefully remove the full spool. Replace the paper band that came with it or secure it with a rubber band and place the spool in the metal can. Take it to your dealer for processing as promptly as possible. Put the empty spool back on the lower spindle.





## Rewinding Film

The mechanism built into the cover of your Cinemax 85E allows you to rewind film already exposed so it can be reexposed for special effects. Image overlapping and superimposed titles are possible just by rewinding the film back a predetermined amount and exposing the second subject over the first.

The Rewind Frame Counter is calibrated in single frames, 16 frames per revolution. Five revolutions of the counter equals one foot of film (80 frames). While shooting movies, use the footage counter click as a guide as to how much film you want to wind back (each click equals .6 foot or 48 frames).

To wind the film backward, follow these steps:

- 1** Set the Rewind Film Counter to 0 (red dot).
- 2** Push Rewind Selector down to R (A is for normal operation).
- 3** Watch the rotation of the Rewind Frame Counter and turn the Rewind Crank in the direction of the arrow until you have wound back the desired amount of film.
- 4** Push the Rewind Selector back to A and reexpose the film that has been rewound.

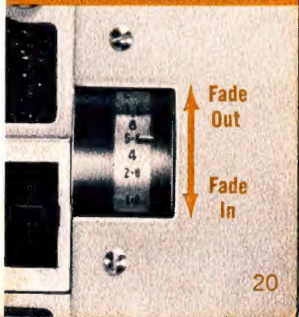


## Special Techniques

**Fading Out**—This is dimming the scene down until it disappears (movie appears black). To do this, first mount the camera on a tripod. Set the Automatic and Manual Control to Manual, and to the same lens opening (on the indicator) that was being set for that scene by the electric eye. Then, take movies and slowly turn the control from the manual setting to the C or closed position. When the control dial reaches the C position, the film will not be exposed and will project completely black.

**Fading In**—To fade in from black to a normal scene brightness, start with the Automatic and Manual Control in the C position and turn it toward Manual slowly until the correct lens opening is set on the Lens Opening Indicator (determine the correct opening by a previous reading with the control on Auto).

**Lap Dissolves**—This technique consists of a scene fading out and a new scene fading in at the same time. To do this, use the fading-out technique described above, but rewind the film back (see page 19) the same distance it took to fade out. Then take a new scene, fading in as described above.



## Care and Cleaning

Your Argus Cinemax 85E Camera is a fine precision instrument and deserves the best care. Protect it from jarring or vibration and from extremes of heat, moisture, and dust. Keep the camera in the carrying case when not in use.

Clean out the interior of the camera occasionally with a small camel's hair brush. Be sure to brush away any dirt or particles that may be underneath the pressure plate and in the film gate as they may show up in your movies. Do not attempt to remove the pressure plate from the camera. Never oil any part of your camera.

To clean the front of the camera lens, blow the dust off first, then use a camel's hair brush or lens tissue. Use lens cleaning fluid sparingly and only if it becomes necessary. Lens cleaning materials are available from photo dealers.

## Specifications

**Lens:** f/1.6 Cinemax Zoom lens, 16-element design, focal length variable from 8.5mm to 42.5mm, focusing mount.

**Lens Openings:** f/1.6 to f/16, automatically controlled by the electric eye or can be set manually if desired.

**Shutter:** Rotary-type with governor-controlled shut-off; 12, 16, 24, 32 and 48 frames per second; 1/36 sec. at 16 fps and single frame.

**Film Speeds:** Electric eye can be set for ASA 10 to 400 at any filming speed.

**Construction:** Metal construction throughout. Dimensions: 7 $\frac{3}{4}$ " x 2 $\frac{1}{2}$ " x 5 $\frac{7}{8}$ "; Weight: 3 lb. 7 oz. (less pistol grip).

**Viewfinder:** Reflex-type, prism-reflected viewfinder image, focusing eyepiece.

Cut off this card, fold it on dotted line,  
and keep it with you for reference.

Camera  
Serial  
Number

Owner's  
Name

Street

City &  
State

Phone

## Argus Cinemax 85E Movie Camera Owner's Identification Card

### Check List for Outdoor Movies

1. Wind the camera fully with the wind key.
2. Load the camera and run the film until counter shows "0".
3. Set the speed of your film on the ASA film speed dial.
4. Set Automatic and Manual Control to Auto.
5. Preview picture by rotating the lens zooming ring, set the focus.
6. Hold the camera steady and press the release.

Remember, when the film has been through the camera only once, it is just half-exposed. Turn spool over and reload. When completely exposed, film will be back on its original spool.

# Argus unconditional guarantee

Your Argus Cinemax 85E camera is unconditionally guaranteed by the manufacturer to operate properly for a period of one year from date of original purchase. If, during this period, your camera fails to operate for any reason, Argus, Incorporated, will restore it to operating condition at no charge to you. (This includes all parts and labor.)

This unconditional guarantee applies to the product itself. We regret that we are unable to assume liability for loss of film or for other expense or inconvenience.

This unconditional guarantee is valid only for the original retail purchaser and only if the product is returned prepaid, directly or through an Argus dealer, to the Customer Service Department, Argus, Incorporated, Ann Arbor, Michigan, or their authorized service location listed below. The date and place of original purchase must be included, along with a description of the difficulties encountered.

Many apparent product difficulties are actually a matter of incorrect usage. It is always wise to see your Argus dealer before returning the product for servicing.

## **CUSTOMER SERVICE DEPARTMENT, ARGUS, INCORPORATED**

<b>MAIN OFFICE</b>	424 Fourth Street, Ann Arbor, Michigan
<b>METROPOLITAN NEW YORK</b>	106 West 32nd Street, New York 1, New York
<b>WESTERN STATES AREA</b>	3410 South LaCienega Blvd., Los Angeles 16, California 215 Littlefield Avenue, South San Francisco, California 1021 East Pine Street, Seattle 22, Washington
<b>IN CANADA</b>	1231 Martingrove Road, Rexdale, Ontario

## **Service**

For further information on the operation of your camera, or for servicing or replacement parts, see your Argus dealer or authorized service location, or write to:

**CUSTOMER SERVICE DEPT.  
ARGUS, INCORPORATED,  
ANN ARBOR, MICHIGAN**

When writing, mention you have the Argus Cinemax 85E Movie Camera, and list the serial number found inside the camera.

**argus**  
**INCORPORATED**  
**CHICAGO 48, ILLINOIS**

PART NO. 9289-610  
LITHO IN U.S.A.